Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 224 of the Act	)	WC Docket No. 07-245
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51

REPLY COMMENTS OF MAHANGER CONSULTING ASSOCIATES

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I. INTRODUCTION

Mahanger Consulting Associates (MCA) respectfully submits these reply comments to the Federal Communications Commission (FCC) in the matter of its rulemaking on implementation of the proposed National Broadband Plan. Mahanger Consulting Associates is a joint use consultancy that has been providing consulting services since 1989 to Incumbent Local Exchange Carriers (ILECs) and to a lesser extent to cable television companies (CATVs). As a consequence of its twenty-one-year, exclusive dedication to the subject, MCA has had extensive experience with the issues underlying joint use, including the historical and current mechanisms for developing joint use rates. This submission will respond to the comments of the electric industry in particular, and will also pinpoint some of the factors that result in overstated joint use pole attachment rates under the FCC's rate formulas and their underlying cost-development methodology. These factors contradict the electric industry's assertion that pole attachment rates are insufficient to compensate power companies for the use and occupancy of their pole infrastructure.

II. ANALYSIS

In its comments the Coalition of Concerned Utilities points out that joint use agreements between electric companies and ILECs are "well established joint use arrangements which were originally established almost 100 years ago."[1] (The ILECs are those local telephone companies which were already in place or "incumbent" when the 1996 Telecommunications Act was enacted.) The position of the electric companies is that these agreements, including their provisions for the allocation of costs between them and the ILECs, are sacrosanct and should not be disturbed by the FCC.

In any discussion of the history of joint use agreements, it is important to understand the governing principles that applied when joint use was initially established. These principles were encapsulated in a series of three reports on "Physical Relations Between Electrical Supply and Communications Systems," published initially from 1922 to 1926 by the Joint General Committee of the National Electric Light Association and Bell Telephone System, and reissued together in July, 1945, by the Joint General Committee of the Edison Electric Institute and Bell Telephone System. The three reports were reissued without any change in substance, as the Committee's letter which accompanied them pointed out.

The second of these reports was initially published on February 15, 1926. It was entitled "Principles and Practices for the Joint Use of Wood Poles by Supply and Communications Companies," and formalized the principles and practices for joint use developed by the Joint General Committee of the electric and telephone industries. Two of the fundamental joint use principles and practices articulated in these guidelines, as propounded initially in 1926 and reiterated in 1945, are excerpted here.[2]

Regarding the Principles that should govern the allocation of joint use costs, the guidelines declared:

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[1] Coalition of Concerned Utilities National Broadband Plan comments at 131.

[2] Excerpted from "Principles and Practices for the Joint Use of Wood Poles by Supply and Communications Companies," the second of a series of three reports on "Physical Relations Between Electrical Supply and Communications Systems" published initially from 1922 to 1926 by the Joint General Committee of the National Electric Light Association and Bell Telephone System, and reissued together by the Joint General Committee of the Edison Electric Institute and Bell Telephone System, July, 1945.

5. Costs

> The allocation of costs between the parties at interest should be prima facia [*sic*] reasonable and equitable, taking into account ***all factors involved*** [emphasis added]. [3]

This is an unambiguous criterion; it provides that to be reasonable and equitable, the allocation of pole costs between two joint users must take into account *all* the factors that impact the use of a shared pole. In today's context that has to include the multiple new parties now occupying joint use poles and the contributions they make to their cost.

In the section on recommended joint use Practices, the guidelines identified two types of joint use agreements for accomplishing the equitable sharing of the cost of joint use poles:

2. Types of Joint Use Agreements

> Joint use agreement [*sic*] should preferably be of a type under which each of the parties shares equitably in the cost of joint poles. This may be accomplished in either of the following ways:
>
> (a) Space rental under which form of agreement the licensee rents space on the pole of the Owner and pays a rental per pole which is based on the amount of space *reserved* [emphasis added]. A much used form of this is the so called "flat rental per pole" where *the division is practically equal* [emphasis added] and the rental is approximately equal to one-half the average annual charges on a pole which is stipulated as the standard of reference.
>
> (b) Joint ownership, under which form of agreement each of the parties owns a half interest in each joint pole and pays one-half the cost in place of the pole which is stipulated as the standard of reference.[4]

Under the "space rental" form of agreement described in (a) above, the licensee pays a "rental per pole which is based on the amount of space "reserved" on the pole for its exclusive use. The "flat rental per pole" form of agreement, "where the division [of space reserved] is practically equal and the rental is approximately equal to one-half the average annual charges on a pole," is identified as a much used form of this agreement. The "standard of reference" for this space-based agreement - i.e., the basis for the sharing of joint use costs - is the average annual carrying charges or expenses associated with a joint pole.

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[3] *Id*. at 37.
[4] *Id*. at 38.

The National Broadband Plan has recommended adoption of the FCC's "Usable Space" cable formula, according to which all parties on a pole pay a rental rate that is based on the space reserved on the pole for that party.[5] This integrated, all-inclusive cost-allocation approach is entirely in keeping with the earliest principles of joint use as set out above. Most electric companies resist this uniform cost-allocation approach, however, and resist in particular having it apply to the ILECs, with whom they have existing joint use arrangements. These agreements are typically two-party pole-ownership and cost-allocation arrangements established at a time when there were no additional pole users - CATV arrived in the 1970s, and the explosion of telecommunications carriers began in the 1990s. It is in the interests of the electric companies to preserve this outdated two-party relationship which benefits them immensely, as will be discussed more fully later in this analysis.

The important fact for the Commission to recognize is that because they are in many cases decades-old, many of the joint use agreements electric companies have with ILECs would have been signed with the joint use principles articulated above in mind. Consequently, bringing the ILECs into an updated joint pole cost-sharing arrangement that takes into account the amount of space reserved for multiple pole users and the associated sharing of costs by multiple parties would not contravene but would rather embody the historical principles of joint use.

A. The electric industry's dominance over the nation's pole infrastructure is a historical accident, and providers of broadband and other communications services, including the ILECs, require access to utility poles today under terms that are fair, reasonable and uniform in order to advance the public interest.

The United States Telecom Association has asked the Commission to exercise its statutory authority to include the Incumbent Local Exchange Carriers (ILECs) within the ambit of whatever rate mechanism it adopts.[6] In its comments the Coalition of Concerned Utilities

[5] *Connecting America: The National Broadband Plan*, The Federal Communications Commission ("National Broadband Plan") (March 2010), at 110, *available at* http://download.broadband.gov/plan/national-broadband-plan.pdf.

[6] The United States Telecom Association National Broadband Plan comments at 2.

opposes extension of the FCC's regulatory authority to the ILECs, touting joint use agreements between electric companies and ILECs as models of cooperative endeavor:

> In a joint use arrangement, however, both parties are dependent on the other for access to customers, because both parties are pole owners in their own right [footnote omitted]. As a result, *a natural governor limits abuse in any joint use arrangement by either party* [emphasis added]. Since each party is dependent upon access to the other's poles, each is motivated to treat the other in a fair and non-discriminatory manner on mutually acceptable terms and conditions.[7]

Sixteen pages later, under the heading "6. ILECs have used their leverage in joint use and joint owner relationships to abdicate their joint use responsibilities," the Coalition presents a nearly four-page litany of complaints about ILEC shortcomings in their joint use relationships, including their failure to set and own poles.[8] This raft of complaints, summed up with the statement "…the ILECs…have been shirking their joint use responsibilities"[9] flatly contradicts the Coalition's assurance to the Commission that joint use between electric companies and ILECs is a faultless and flawless venture. The Coalition's assertion that joint use relationships are working wonderfully and should not be disturbed by the FCC is a smokescreen.

The power companies do indeed now own more joint use poles than the ILECs. But this fact has very little to do with negligence on the part of telephone companies regarding their pole-setting obligations. It is the cumulative effect of several disparate factors and conditions all militating against ILEC pole ownership:

- Because electricity is the primary, indispensable requirement in building construction, with telephone service an incidental or secondary convenience, the local power company was always called first and was thus more likely to set and own the shared service poles.

- As is inferred by the Coalition's observations about "double wood," telephone companies were often required to transfer their facilities to taller power poles set right next to their poles, causing the existing telephone poles (and their ownership) to be sacrificed.

[7] Coalition of Concerned Utilities National Broadband Plan comments at 131.
[8] *Id.* at 147-150.
[9] *Id*. at 150.

- Power companies may well have pursued an active policy of owning the poles they occupy because with ownership came greater control over exposure to liability for injury caused by their own more dangerous electric facilities.
- Similarly, the need for power companies to respond immediately in emergency situations to minimize damage from fallen electric facilities would make the replacement of telephone-owned poles with power-owned poles quite likely.

- There has been a historical antipathy to mixed ownership of pole lines, so for instance if a telephone company needed a mid-span pole for clearance in a power line, it would pay for that pole, but because it was in the power line the power company would own it.

- As the voltages carried on poles increased and the electric industry graduated from cross-arm to vertical construction, power companies had an ongoing need for taller and taller poles, while ILECs used less space used over time and did not need replacement poles.

It is easy to see how and why the electric companies came to be the dominant pole owner - the first item alone in the above list, the overriding need for electricity, would have been sufficient to create the imbalance. In the early days of joint use, when both industries were regulated, it made little effective difference which industry owned the jointly occupied poles. In keeping with the spirit of cooperation that gave birth to joint use itself in the first place, the telephone companies could acquiesce to and accommodate the power industry's dominant pole ownership. It is therefore not reasonable to point to the imbalance of ownership today as the simple fault of the telephone industry.

There is another important historical consideration. As the Coalition has stressed, joint use dates back nearly a hundred years, to the time of initial expansion of electric and telephone service. Both fledgling industries were accorded rights of condemnation over private property, and often acquired their easements and rights of way by virtue of this preferential status. The compensation paid for those land rights may well have been negligible. With the national landscape now choked with the power industry's infrastructure, this option is not open to communications companies requiring a means of disseminating new services today. As a

consequence these companies, including the ILECs, should be accorded non-discriminatory access to the existing pole infrastructure under fair, reasonable and uniform terms.

B. The FCC'S "Usable Space" formula:

(1) Achieves a fair, reasonable and uniform allocation of the total cost of a pole to all users, including both electric company and ILEC pole owners;

(2) Does not suffer from the shortcomings of the CLEC formula.

Stated succinctly, the purpose of the two FCC formulas (CATV or CLEC/telecom) and their underlying methodology is to distribute the annual cost of owning and carrying a jointly occupied distribution pole among its users in a manner that reflects, fairly and reasonably, each user's space-usage benefit. The methodology to achieve this involves three components. The first component is the owner's capital investment in an average joint use pole exclusive of any non-pole-related fixtures or "appurtenances" of the owner. The second factor is the percentage of its initial investment in the pole which the owner incurs each year, reflecting five separate component costs: cost of capital, maintenance, depreciation, taxes, and administration. The average capital investment multiplied by the annual "carrying" charge factor produces an amount that represents the annual expense the pole owner incurs each year to own and carry the average pole. The third component of the methodology is the percentage of this annual expense each pole occupant is allocated based on its usage benefit.

The FCC has determined that 35- and 40-foot poles suffice for joint use. With 6 feet in the ground and 18 feet required for ground clearance, 11 feet are available on a 35-foot pole and 16 feet on a 40-foot pole for the placement of attachments. Blending the two pole heights, the FCC's formulas utilize an average 37.5-foot pole with 13.5 feet of usable space and 24 feet of

unusable space.[10] The FCC has also set a presumption of five-user poles in "urbanized" locations (population 50,000 or higher) and 3 in "non-urbanized locations" (population less than 50,000).[11]

The stated intent of the FCC's Usable Space of CATV formula is to allocate the total cost of the blended pole in direct proportion to its users' respective percentages of the 13.5 feet of usable space. This has produced a CATV allocated share of 7.4% of the annual cost of the pole for the use of 1 foot of usable space. The FCC's CLEC or telecom formula allocates the cost of the usable space on the pole in direct proportion to use, but then distributes the cost of two-thirds of the remaining 24 feet of unusable space equally among all the pole's users. This results in a CLEC allocation of 11.2% on five-user urbanized poles and 16.9% on three-user non-urbanized poles for the use of 1 foot of usable space.[12]

The American Power Association in its Comments states that "Under the [cable] formula, capital and operating costs of a pole are allocated among attaching entities solely by reference to the "usable space" on the pole…,"[13] and that the formula only accounts for the usable space on the pole.[14] The inference is that the FCC's usable space formula merely considers the usable space on the pole, without any reference to the pole's unusable space. This is not the case. The formula allocates and accounts for the ***entire*** cost of a pole, with reference to both usable space and unusable space, and with a user's allocation of the cost of both being predicated upon its proportionate use of the usable space. The formula starts from the proposition that each foot of the 13.5 feet of usable space has equal value - a value which is equivalent to approximately 7.4% of the cost of the pole. If a CATV user were only paying for 1 foot of the pole, as opponents of

[10] See *Consolidated Partial Order on Reconsideration*, 16 FCC Rcd 12103, FCC 01-170 (2001) at ¶ 48.
[11] *Id*. ¶¶ 71-72.
[12] *Id*. Appendix A., Revised Rules.
[13] American Public Power Association Section 224 and National Broadband Plan comments at 6.
[14] *Id.* at 10.

the formula appear to suggest, it would be absorbing 2.67% (1/37.5 ft) of its cost, not 7.4%. A cable attacher pays for the same share of the unusable space as it does of the usable space.

The CLEC formula, on the other hand, can be opposed on the basis of the fact that it does not account for the cost of the entire pole. It leaves one-third of the non-usable space unallocated, which is equivalent to requiring the pole owner to absorb this cost. The CLEC formula's failure to account for 8 feet of the blended pole's unusable space is an anomaly which has a disproportionately unfair and unreasonable impact on the ILEC pole owner. In an urbanized five-user scenario, across-the-board application of the CLEC formula would require an electric pole owner to pay for 19.7 feet of total pole space while using 8.5 feet - a responsibility for total footage of just over twice its usable space allocation. The ILEC pole owner, on the other hand, would pay for 13.2 feet of space while typically occupying only 2 feet of usable space - in other words total footage of nearly seven times its usable space.

Edison Electric has asked the FCC among other things to: (i) re-characterize the safety separation space on the pole, now considered by the FCC to be part of the pole's usable space, and deem it common or unusable space; (ii) reduce the FCC's presumed number of attaching entities on all pole to three; and (iii) discount the pole owner as an attaching entity for purposes of the CLEC formula.[15] Edison Electric is retreading tired ground. The FCC determined back in 1979 that electric companies use the separation space for the placement and maintenance of "…street light support brackets, step-down distribution transformers, and grounded, shielded power conductions therein,"[16] and has reaffirmed this finding ever since. It has also pointed out more recently that the presence of electric supply cable actually precludes other pole users from attaching in this space, observing that but for presence of the electric company on the pole, this

[15] Edison Electric Institute and The Utilities Telecom Council National Broadband Plan comments at 75-77.
[16] See *Memorandum Opinion and Second Report and Order*, 72 FCC 2d 59, FCC 79-308 (1979) at ¶ 24.

space would be usable.[17] Edison Electric's second request attempts to establish the pole-usage configuration of the 1970s, when CATV began to attach its facilities as a third user to poles occupied by the local telephone and electric companies. This request is inapposite in 2010 given the proliferation of communications carriers since 1996, all with a need to attach their facilities to poles. Its third request would require the electric pole owner to pay for 8 feet of unusable space (the unallocated one-third) while using 8.5 feet of the usable space, while the ILEC pole owner also pays for the same 8 feet of unallocated space while using 2 feet of the usable space. This recommendation does not resolve the existing issues of fairness.

The disparities are thus easy to identify, and they mostly disadvantage the ILECs. As demonstrated above, the ILECs as pole owners are disadvantaged by the structure of the CLEC formula. Meanwhile they also continue to pay disproportionate percentages of the annual expense associated with an expensive electric-owned joint use pole under their outdated joint use agreements with electric companies based on the obsolete presumption that joint use poles are only occupied by two parties. The power companies enjoying the benefit of exorbitant ILEC rental rates are vigorously resisting any extension of the FCC's jurisdiction to cover the rates paid by the ILECs, which if it occurred would really only reflect the reality of multi-party pole use in today's context.

A pole attachment formula should tie rental rates directly to the benefit of space usage enjoyed by a user. The Usable Space formula is the only model that achieves this fair and reasonable result, accounting for both all pole use and all space use in equal measure. In addition the formula is elegant, easy to interpret and simple to apply. Its uniform, across-the-board adoption would be an equitable and rational solution to joint use's various disparities and contradictions. As USTelecom points out in its comments, the Supreme Court has held that the

[17] Report and Order, 15 FCC Rcd 6453, FCC 00-116 (2000) at ¶ 22.

broad mandate to regulate pole attachment rates inherent in the provisions of Section 224(b) of the Pole Attachment Act is not limited by, but rather encompasses, the two specific formulas for CATVs and CLECs contained in Sections 224 (d) and 224 (e) of the Act.[18] This means that "the Commission is authorized to adopt a uniform pole attachment rate applicable to all types of providers, including ILECs."[19] Certainly the Commission is free to adopt the Usable Space formula for providers of broadband in order to facilitate its deployment.

It should be noted in passing that adoption of the Usable Space formula would allay the concern expressed by the Ohio Commission, to the effect that an ILEC would pay 92.6% of a pole while a telecommunications provider would pay only 7.4%. The FCC's presumptions can be overcome by actual facts, so in this context as the only users of the usable space on this pole the two occupants would share its cost in direct proportion to its use of the usable space, and if such usable space usage was equivalent its costs would be shared equally, and not in the ratio of 92.6% to 7.4%.[20] The equation works every time - fairly and precisely.

All communications carriers providing broadband services would be covered by the Usable Space formula newly adopted for the purpose. This could eventually render the CLEC formula effectively redundant and its application would be *de facto* discontinued, a desirable result since its variable and inconsistent application fails to achieve fair results. Extending the newly adopted formula to ILECs pursuant to the authority of the Pole Attachment Act would have the added advantage of redressing the inequities currently being experienced on so many fronts by the ILECs.

[18] See The United States Telecom Association National Broadband Plan comments at 16, citing the United States Supreme Court, *Nat'l Cable & Telecomms Ass'n v. Gulf Power*, 434 U.S. 327, 335-36 (2002).
[19] The United States Telecom Association National Broadband Plan comments at 16.
[20] Public Utilities Commission of Ohio corrected National Broadband Plan comments at 11.

The Alliance for Fair Pole Attachment Rules has petitioned the Commission to extend the CLEC rate to providers of voice over internet protocol service,[21] but to do so would merely perpetuate and entrench utilization of the flawed CLEC formula and this petition should be denied.

C. The FCC's methodology for determining the annual cost of a pole results in overstatement of the pole owner's costs in several regards and should be reviewed and adjusted.

Part B above discusses the anomalies that are possible and in fact exist with respect to the widely disparate percentage of a pole owner's costs paid by attachers, in particular the excessive percentages absorbed by the ILECs on the poles. This section will discuss the capital pole investment and carrying cost factors - the other two components of the FCC methodology - and the cost overstatements inherent in that methodology.

The Commission has developed appurtenance factors of 5% for the ILECs and 15% for the electric companies to remove the cost of non-pole-related appurtenances from a pole owner's pole line account. There are two other pricing areas which deserve the Commission's attention to ensure the removal of excess costs not related to the cost of owning and carrying the 37.5-foot pole that is the shared structural asset. If those excess or unrelated costs cannot be precisely identified, then the Commission might want to consider the development of additional representative factors to achieve the purpose.

The first relates to the pole owner's capital investment in an average "bare" joint use pole, that is, a pole with the cost of all appurtenances related to the owner's business backed out. The second factor is the percentage of that capital investment a pole owner spends annually to

[21] See Alliance for Fair Pole Attachment Rules National Broadband Plan comments.

own and "carry" a pole, which is the sum of five components: cost of capital, maintenance, depreciation, taxes, and administration. The maintenance component of this factor is particularly problematic.

a. Determining accurately the average cost of a pole for purposes of cost allocation

In its Comments the American Public Power Association argues for the full recovery by utility pole owners of their capital costs.[22] In this regard it is important to understand how the FCC's methodology actually overstates the cost of a jointly used pole.

The FCC pole attachment formulas permit a pole owner to include all the poles in its pole line account - all heights, all classes, all material types - in determining the average cost of a pole for purposes of the formula. This means that the capital investment in all of an owner's poles, of all heights - steel or concrete, 45-foot to 85-foot or taller - are factored into the equation. Yet only the usable space available on a 37.5-foot blended pole - the average of 35-foot and 40-foot poles - is used for determining an attacher's allocated percentage of costs. This is an inconsistency which results in an overstated average pole cost.

There is an unresolved anomaly here. The Pole Attachment Act, 47 U.S.C. § 224(d)(2) as amended in 1996 provides quite clearly:

> As used in this subsection, the term "usable space" means the space above the minimum grade level which can be used for the attachment of wires, cables and associated equipment.

What this seems to direct is that if all pole space above minimum grade is considered usable, and all of an owner's poles are factored into the average cost of a pole, then the usable space on all pole heights - not just the space available on the blended 37.5-foot pole of the FCC formulas - should be factored into the space usage determination. Conversely, if only 35-foot and 40-foot

[22] American Public Power Association National Broadband Plan comments at 13-17.

poles are used to determine space usage, resulting in the blended 37.5-foot pole, then only the investment in 35-foot and 40-foot poles should be used in the determination of average pole cost.

The current methodology - invoking a 37.5-foot average pole for allocating space, but including all poles in the determination of allocation cost, produces an overstated cost that does not equate with the true blended pole. To the extent that a pole owner does not keep separate track of the cost associated with different heights, classes and types of poles, this inconsistency in the FCC formulas can also be addressed by development of a factor to remove the cost associated with poles other than 35- and 40-foot poles in the determination of cost.

b. <u>Development of a maintenance factor that excludes non-pole-related costs</u>

The electric industry routinely alleges that it is only seeking to recover its costs.[23] However, again, a pole attacher may validly be asked to help defray only those costs that are directly associated with the structural asset it is using for its attachment(s). That structural asset is the joint use pole, and thus any costs associated with the pole owner's own attachments on the pole may not be validly included in a rate development methodology directed at reimbursing an owner for pole-related costs only.

An electric utility's annual pole carrying charge factor is derived from its annual pole line expenses, and expressed as a percentage of its average capital investment in poles. If the relevant utility account is overstated, the resulting annual carrying charge percentage will be too high. To demonstrate simply, $5 in maintenance expense as a percentage of $100 in capital investment is a maintenance charge factor of 5%, but $2 in maintenance expense as a percentage of the same investment is a factor of only 2%. It is therefore imperative to ensure that the

[23] See, for instance, CPS Energy National Broadband Plan comments at 5-7.

expenses included in the calculation of the maintenance factor are an accurate reflection of the costs actually incurred by an electric company.

The FCC formulas permit an electric company to utilize its expense account 593 from the Uniform System of Accounts Prescribed for Public Utilities in the determination of its maintenance factor associated with poles. A close examination of account 593, however, indicates that many of the cost inclusions in this account are associated not with the maintenance of poles, but with maintenance of the electric company's overhead lines. Expenses booked to account 593 include the cost of maintaining fixtures and overhead conductors and devices - expenses that pertain to the maintenance of a power company's business enterprise, not to the pole:

> 2. Work of the following character on overhead conductors and devices:
>
> a. Overhauling and repairing line cutouts, line switches, line breakers, and capacitor installations
> b. Cleaning insulators and bushings
> c. Refusing line cutouts
> d. Repairing line out circuit breakers and associated relays and control wiring
> e. Repairing grounds
> f. Resagging, retying, or rearranging position or spacing of conductors
> g. Standing by phones, going to calls, cutting faulty lines clear, or similar activities at times of emergency
> h. Sampling, testing, changing, purifying, and replenishing insulating oil
> i. Transferring loads, switching, and reconnecting circuits and equipment for maintenance purposes
> j. Repairing line testing equipment
> k. Trimming trees and clearing brush
> l. Chemical treatment of right of way area when occurring subsequent to construction of line

The fact is that once a pole is in the ground it remains in place for some 40 years, and requires very little maintenance, with the exception of periodic inspection of its condition, preservative treatment at the ground line or the attachment of reinforcing stub poles to extend its life, or occasionally, coating treatments to prevent miscellaneous damage (from woodpeckers, for instance). Defective or damaged poles are replaced, not repaired. With few exceptions, other

maintenance tasks, even the occasional need for straightening, are a function of the attachments on the pole, not of the pole itself.

A particular example of an impermissible, non-pole-related expense in the above list is k., trimming trees and clearing brush. Tree-trimming is a massive recurring power company expense associated with clearing wide swaths of right of way primarily to keep the owner's energized facilities clear of trees. This and similar non-pole related expenses should be backed out of an electric company's account 593 before it calculates its pole-related maintenance expense.

It may not be possible to identify with precision the amounts in account 593 that are associated with non-pole-related maintenance. If this is the case, the FCC can develop factors to remove electric-industry-specific expenses from utility owners' pole-line maintenance accounts, in order to back out maintenance expenses that are not related to the pole itself.

D. The make-ready process pursuant to which a pole attacher pays the full initial capital cost of a new or replacement pole is inconsistent with requiring the attacher to also pay the recurring annual costs associated with the same pole.

Since the 1920s, joint use contracts between ELCOs and ILECs have contained provisions requiring one party to pay for the capital cost of placing a pole that will actually be owned by the other party. For instance, there has traditionally been a historical antipathy to mixed ownership of pole lines. Consequently, poles set in one party's line for the benefit of a joint user will often be paid for in whole or in part by the joint user, but will be owned by the owner of the line. The party that ultimately owns the pole has not actually incurred its cost, since it has been reimbursed by the joint user for the capital cost associated with setting the pole.

The same thing happens under current joint use conditions when a CATV or CLEC needs to attach to a pole and must reimburse the pole owner for the cost of "make-ready" to provide it with space on the pole. When this involves a capital expenditure - the cost of a completely new pole to provide additional height to accommodate the user - such capital expenditure by a pole owner is generally fully reimbursed by the user. In such cases the pole owner has not incurred any of the cost of setting the pole.

In his Comments Bob Matter of Bob Matter Consulting points out that ILECs and other pole users routinely pay make-ready costs of $1,000 or more per pole.[24] To expand upon Mr. Matter's observation, the cost of make-ready to attach to power-owned poles would include not just the cost of placing a new pole to accommodate the attachment(s) of a pole user if necessary, but also the cost of rearranging or transferring the existing attachments of the owner as necessary. What this means is that the make-ready payment a user is required to make can and often is more than the cost of setting the required pole.

If the attacher could own the pole, it would be in a far better position than it is when it not only has to pay to set the pole, but must also pay to rearrange or transfer the attachments of the owner. But worse - after paying to set the pole and paying to transfer or rearrange the owner's attachments, the attacher must now also pay the owner annual rental to occupy the pole it has just purchased.

Here are the implications inherent in these facts. If an attacher has purchased this pole, then the owner's investment in the pole is $0. It can have no cost of capital associated with the investment. And if there is no investment, there can be no depreciation of that investment. Neither can there be any taxes payable on the investment. Nor are there any administrative costs associated with the investment since the FCC methodology calculates the administrative factor

[24] See Bob Matter Consulting National Broadband Plan comments, Terms and Conditions (145).

based on the pole owner's total investment in its poles. What is left - the only expense the pole owner actually incurs with respect to this pole which it has not bought - is maintenance of the pole.

It needs to be remembered that with respect to both FCC formulas, each formula is the high end of a possible spectrum of rates that ranges from the incremental cost of providing the attachment to the rate produced by application of the formula.[25] The low "incremental cost" ends of both formula ranges are routinely ignored by pole owners, however. In point of fact, under the circumstance where an attacher has repaid the owner the entire cost of a brand new pole to accommodate its attachments, it is arguably the low end of the range of rates that should determine the user's pole attachment rental rate for each pole it has thus purchased for the owner.

The issue of the true cost of maintenance will be discussed in the next section. It is first necessary to consider the additional implications for the pole user of the capital contribution it has just made to the power company's pole line investment.

The new attacher has just bought a pole, but it has no item of plant to add to its inventory. It cannot lease space on the pole to any other entity. Nor does it have any rights of occupancy - it can actually be later asked by the pole owner to remove its attachments from the pole it has purchased. These are the incidents of make-ready - remote indeed from the incidents of ownership.

Furthermore, since poles come in five-foot increments, in changing out an existing pole the attacher actually buys 5 feet of usable space, or five times the space it actually needs, in order to get 1 foot of space - the typical CATV or CLEC allotment on a pole. Although it has effectively purchased 5 feet, however, the attacher cannot lease the excess 4 feet of space and obtain the income from it. On the contrary, it is the pole "owner" - which has not paid a penny

[25] See *Consolidated Partial Order on Reconsideration*, 16 FCC Rcd 12103 at ¶ 8.

for that pole or the additional 4 feet of space that came with it - that now owns the right to use or rent out that additional space and receive any income it generates.

In other words the process of assessing a pole attacher the full cost of a new or replacement pole as make-ready does not merely cause a pole user to pay double (once to set the pole and then again to rent the same pole it has already paid for in full). The process of make-ready actually forces a user to purchase 4 feet of new income-generating space for the pole owner to occupy or lease to other parties.

For all these reasons, the only poles for which an attacher should be required to pay the maximum rate based on fully allocated costs are existing poles upon which an attacher is accommodated without the need to change out the pole. The up-front payments attachers are obliged to make in the form of make-ready might well support adoption of the low end of the range of both formulas - payment of a pole owner's incremental cost. This is a rate option that actually already exists.

E. It is important for the FCC to ensure that both the capital investment in poles and the recurring annual expenses used in a pole owner's rate development methodology exclude any and all costs that have been reimbursed by other pole users.

As the make-ready discussion above demonstrates, pole users, including the ILECs, are required to reimburse a pole owner for all sorts of costs associated with being accommodated on the owner's poles. These include the pole owner's capital construction costs a pole user reimburses as make-ready payments to set new or replacement poles (Contributions in Aid of Construction). They also include recurring expenses such as the cost of rearranging the owner's attachments as needed to accommodate a user, pole and attachment inspections, surveys/audits - the list goes on.

Because the pole owner has not incurred these capital expenditures or recurring expenses, they should not be included in the development of its average pole cost or its annual carrying charge. If a capital expenditure is initially charged to the owner's pole line account, then it should be backed out again when it is reimbursed by the attacher. If an owner's pole line account is not reduced or offset by the amount of such reimbursements, then that pole line account is correspondingly inflated by the sum of all such reimbursements.

The FCC has recognized and pinpointed the requirement for a pole owner to credit its pole line account with reimbursements it has received for pole construction costs (Contributions in Aid of Construction) ever since it began regulating pole attachment agreements. In its 1979 Memorandum Opinion and Second Report the FCC expressly required that a pole owner offset its pole line account in an amount equal to such reimbursements to prevent double payment by the CATV:

> …where a utility has been directly reimbursed by a CATV operator for non-recurring costs, including plant, such costs must be subtracted from the utility's corresponding pole line capital account to insure that CATV operators are not charged twice for the same costs.[26]

It repeated this requirement as recently as 2001, stating expressly again in footnote 153 in its Reconsideration Order that Gross Plant (Poles) "…should not include costs for pole change-outs or other make-ready costs that were paid by the attacher."[27]

Similarly, expenses that have been reimbursed by other pole users, including the ILECs, should be removed from (credited back to) the maintenance expense accounts of pole owners.

The question is - how are these capital and expense reimbursements being reflected in the calculation of the pole owner's costs for purposes of determining pole rental rates? Specifically, if these costs are booked initially to a capital or an expense account that is factored into the

[26] See *Memorandum Opinion and Second Report and Order*, 72 FCC 2d 59 at ¶ 27.
[27] *Consolidated Partial Order on Reconsideration*, 16 FCC Rcd 12103 at ¶ 42.

calculation of the annual pole carrying charge, are they in fact backed out of that account when they are reimbursed by the attacher? If not, such accounts - and the annual pole carrying charge percentage derived from them - are overstated. Furthermore, the utility is recovering twice for the same expenses - once, ***fully***, when it is reimbursed by the pole user, and again, when the same expenses are included without deletion in the calculation of its average annual carrying cost of a pole.

The answer to this question thus directly impacts the issue of ensuring that a pole owner has itself actually expended and may validly recover the cost inclusions in its rate development calculation. Now that pole usage by third parties has been greatly expanded the FCC needs to ensure that owners' pole line capital and expense accounts are actually being credited with all such reimbursements.

To sum up:

(1) The FCC needs to ensure that a pole owner's investment in poles does not include capital construction costs that have been reimbursed by other pole users (Contributions in Aid of Construction, or CIAC).

(2) The FCC needs to insure as well that a pole owner's annual pole carrying charge factor does not include any recurring expenses that have been reimbursed by other pole users.

F. Compliance with the electric industry's request that the FCC not disturb its decades-old joint use agreements with the ILECs would preserve obsolete payment structures in those agreements that permit over-recovery of the industry's costs.

At this point it is appropriate to consider the question of why the electric companies might wish to retain their joint use agreements if the ILECs are so remiss in their obligations.

On page 132 of its Comments the Coalition of Concerned Utilities makes the following observations:

> Pursuant to many joint use agreements entered into by Coalition members and their partners, the ILEC is allocated between 2-3 feet of space on the pole for its attachments, and the electric utility is allocated 4.5-8 feet due to safety and operational requirements. Other joint use agreements may be designed so that neither party pays rental fees to the other unless one party owns a deficient number of poles. Unlike [under] pole attachment agreements, ILECs often are entitled to rent portions of their allocated space to other telecommunications attachers.[28]

Thus the Coalition appears to be asserting that ILECs are entitled to rent portions of their allocated space to other communications attachers and receive the income from this space. This assertion is flatly contradicted by the comments of AT&T. Such third-party income would generally go to the electric company if it owns the pole, as AT&T confirms:

> …under the joint-use arrangement, the electric company enjoys additional compensation on its poles for the same communications space - for which the ILEC is paying now - and yet the ILEC receives no corresponding benefit (e.g., subtenant rent) or reduction in the amount of the attachment rate it has to pay the electric company.[29]

Thus ILECs continue to pay 40% to 50% of the cost of electric company poles in the form of annual rental rates, but generally receive no reduction in those percentages to compensate for CATV and CLEC occupancy of the space previously reserved space on joint use poles for ILEC use.[30]

Consequently, on an urbanized 37.5-foot distribution pole occupied by five attachers - for example, a power company owner, an ILEC, a CATV, and two CLECs - application of the FCC formulas permits an electric company pole owner to recover **7.4%** its annual carrying cost of a pole from the CATV and **11.2%** from each CLEC for their respective use of 1 foot of the pole's usable space. Since neither FCC formula applies to the ILEC on the pole, however, it will pay

[28] Coalition of Concerned Utilities National Broadband Plan comments at 132.
[29] AT&T Inc. National Broadband Plan comments at 13.
[30] *Id.* at 15.

the attachment rental rate that is dictated by its joint use agreement with the electric company. Pursuant to this agreement the ILEC's contribution will be some **40% to 50%**, based on the defunct two-party joint use relationship developed when they were the only joint pole users. Today, as the Coalition concedes, ILECs typically occupy some 2 feet of pole space (maximum 3 feet), while electric utilities can require as much as 8 feet.[31] It is important to note that this estimated use of space by the electric company does not include the separation space, which as the FCC has noted is also usable space used exclusively by and thus attributable to the electric company on a pole.

What this means with respect to an urbanized joint pole is that an electric company potentially receives a combined offset of **69.8% to 79.8%** of the annual carrying cost of the pole (7.4% CATV + 11.2% CLEC + 11.2% CLEC + 40-50% ILEC) for the occupancy of a total of 5 feet of the pole's usable space (assuming 2 feet of ILEC use). The electric company's own effective contribution is thus the remaining **30.2% to 20.2%** for its own utilization of the remaining 8.5 feet of usable space - surely an unreasonable and indefensible outcome that amounts to excessive cost recovery by the electric company. The offset received by the electric company can be even higher if any of the attachers on a utility pole is an unregulated or non-telecom carrier. With sufficient numbers of attachers on its poles an electric company's own contribution to its annual pole cost can rapidly approach $0 (or might even generate income in excess of its costs).

The expectation that the Coalition refers to on page 131 - that each party would set and own a certain number of poles - generally dictated the parties' respective rental rates in the early days of joint use. The intent was that if ownership was in balance according to the designated ownership percentages, no money would need to change hands as no rental would be due. If an

[31] Coalition of Concerned Utilities National Broadband Plan comments at 132.

imbalance in ownership developed, however, the party owning less than its designated share of poles would pay rent to the other party.

Three things follow from this:

(1) Pole ownership percentages were effectively cost allocation percentages. If one party owned less than its allocated share of joint use poles, it would pay the other rental on the excess poles owned by the other party, at a rate generally calculated by multiplying the pole owner's annual cost of a pole by the user's designated percentage.

(2) The theory only works if each party's costs are relatively the same. As the height and therefore the cost of electric poles began escalating, ILEC joint use rental rates escalated correspondingly. It is quite possible to encounter a case where 50% of an electric company's annual pole cost exceeds 100% of a telephone company's cost.

(3) The theory also only works if there are only two parties involved in both the allocation of ownership and the allocation of costs. When two parties are involved in the allocation of ownership but multiple parties in the allocation of costs, as is true today, the system collapses.

The important thing to note is exactly how the system has collapsed for the ILECs. Today's multiple communications carriers are all located in the space once reserved for ILECs on a joint use pole, but the associated rental income generally goes to the pole owner, most often an electric company because of the accidental manner in which the electric companies have come to own the poles, and without altering the ILEC's cost-allocation responsibility as one of the two original joint users.

The ILECs are thus disadvantaged in multiple ways under their outdated joint use agreements.

(1) They have lost a major proportion of the communications space on a pole to CATV companies and other communications carriers.

(2) For the most part, they continue to pay rental based on the two-party percentages of responsibility set out in their joint use agreements.

(3) They typically receive no offset in the rental rates they pay despite third-party contributions to the cost of the electric company pole owners.

(4) Their rates are predicated upon the power industry's now-exorbitant pole costs, which amounts to a subsidy of the electric industry's higher costs by the ILECs.

(5) The factors that have led to the present ownership imbalance - no fault of the ILECs - will continue to expand that imbalance.

Put simply, the ILECs both need and deserve redress.

III. CONCLUSION

The creation in 1996 of a new formula for telecommunications carriers while leaving intact the existing CATV Formula was problematic. The fact that the CATV and CLEC formulas invoke two inconsistent and irreconcilable mechanisms for determining a pole attacher's cost allocation percentage, and thus produce two different percentages for the use of a foot of pole space, has opened them up to criticism. The express exemption of the ILECs from application of the CLEC formula compounded the problem.

Despite the complaints of the electric industry, pole attachments actually represent a considerable subsidization of electric company costs by the attachers on their poles, not "cost recovery" at all. One fact should be noted in this regard: to the extent that a pole owner's cost of capital is included in the annual carrying expense that all pole users share, the pole owner has no

capital of its own invested in the pole. The inclusion of the owner's cost of capital in its annual carrying charge carries with it the corresponding assumption that the owner has borrowed the full capital investment in the pole, and each user pays its full allocated share of the cost of borrowing this capital in its rental payments to the owner.

The urban scenario described in the analysis above demonstrates that as electric companies add more and more attachers to their poles, their revenue intake increases correspondingly. Their revenue intake is also increased by the lease of all the extra footage on their poles bought for them by pole attachers.

The FCC Usable Space formula, applied with the additional adjustments discussed in this analysis, would help somewhat to correct these inequities. The first requirement in this regard is that the calculation of usable space must reflect accurately all the space available on a pole for attachments. The second is that the calculation of costs must reflect only expressly pole-related costs, both capital and expense, exclusive of costs incurred in the service of the pole owner's business enterprise *and* actually incurred by the pole owner. To the extent that a party has already paid all associated make-ready to attach to a pole, it should pay only the incremental cost the owner incurs to accommodate its attachment(s).

If the FCC were to true up its mechanisms for determining pole attachment rates with these objectives in mind it would place all pole users, including the ILECs, on a level playing field, resulting in lower, fairer and more reasonable attachment rates that would further the FCC's objective of facilitating broadband deployment.